



IPW

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on 16 July 2004

Amy Jonsson
Amy Jonsson

ATTORNEY DOCKET: RBUS 1305-1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of Inventor:

Jade M. Kizer

Application No. **10/645,201**

Confirmation No. **7115**

Filed: **21 August 2003**

Title: **Periodic Interface Calibration for High Speed Communication**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Group Art Unit: **2816**

Examiner: *Unknown*

CUSTOMER NO. 38342

FOURTH INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. §1.56

Sir:

It is requested that the information identified in this statement be considered by the Examiner and made of record in the above-identified application. This statement is not intended to represent that a search has been made or that the information cited in the statement is, or is considered to be, material to patentability as defined in 37 C.F.R. 1.56.

Enclosed with this statement is Form PTO-SB/08A and PTO-SB/08B. The Examiner is requested to initial the forms and return them to the undersigned in accordance with M.P.E.P. 609.

Also enclosed with this statement is a copy of each cited document as required by 37 C.F.R. 1.98. The exception to this, in accordance with the 05 August 2003 Official Gazette Notice in which the USPTO waives the requirement for submitting copies of U.S. Patent and Publications for cases filed after 30 June 2003, is that copies of U.S. Patent documents and copies of U.S. Patent publications are not being submitted.

This statement should be considered under 37 C.F.R. 1.97(b) because it is being filed before the mailing date of the first Office Action on the merits.

Fee Authorization. The Commissioner is hereby authorized to charge underpayment of any additional fees or credit any overpayment associated with this communication to Deposit Account No. 50-0869 (RBUS 1305-1). A copy of this authorization is enclosed.

Respectfully submitted,

By: Mark A. Haynes
Mark A. Haynes, Reg. No. 30,846

Date: 16 July 04
HAYNES BEFFEL & WOLFELD LLP
P.O. Box 366
Half Moon Bay, CA 94019
Telephone: (650) 712-0340
Facsimile: (650) 712-0263

O P E Please type a plus sign (+) inside this box → +

PTO/SB/08A (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

JUL 19 2004

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

1

of

4

Complete if Known

Application Number	10/645,201
Filing Date	21 August 2003
First Named Inventor	Jade M. Kizer
Group Art Unit	2816
Examiner Name	Unassigned

Attorney Docket Number RBUS 1305-1

U.S. PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
A1	3,155,102			Niederer, Jr. et al.	11-03-1964	
A2	3,638,121			Spilker, Jr.	01-25-1972	
A3	3,922,491			Bjork et al.	11-25-1975	
A4	4,648,133			Vilnrotter	03-03-1987	
A5	5,243,626			Devon et al.	09-07-1993	
A6	5,485,490			Leung et al.	01-16-1996	
A7	5,511,091			Saito	04-23-1996	
A8	5,523,760			McEwan	06-04-1996	
A9	5,554,945			Lee et al.	09-10-1996	
A10	5,621,913			Tuttle et al.	04-15-1997	
A11	5,742,798			Goldrian	04-21-1998	
A12	6,369,652			Nguyen et al.	04-09-2002	
A13	6,421,389			Jett et al.	07-16-2002	
A14	6,606,350			Dress, Jr. et al.	08-12-2003	
A15	6,657,468			Best et al.	12-02-2003	
A16	6,690,741			Lerrick, Jr. et al.	02-10-2004	
A17	6,717,992			Cowie et al.	04-06-2004	
A18	2001/0048382			Low et al.	12-06-2001	
A19	2001/0053175			Hoctor et al.	12-20-2001	
A20	2003/0063597			Suzuki	04-03-2003	

FOREIGN PATENT DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T6
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
B1	JP	02000035831A			Nitsusan Jidosha KK	08-14-1990	Abstract only	
B2								
B3								
B4								
B5								
B6								
B7								
B8								
B9								
B10								

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →

PTO/SB/08A (08-00)
Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
Sheet	2	of	4	Application Number	10/645,201
				Filing Date	21 August 2003
				First Named Inventor	Jade M. Kizer
				Group Art Unit	2816
				Examiner Name	Unassigned
				Attorney Docket Number	RBUS 1305-1

U.S. PATENT DOCUMENTS						
Examiner Initials ¹	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
A21	2003/0146800			Dvorak	08-07-2003	
A22	2003/0198212			Hoctor et al.	10-23-2003	
A23	2003/0198308			Hoctor et al.	10-23-2003	
A24	2004/0032354			Knobel et al.	02-19-2004	
A25	2004/0057500			Balachandran et al.	03-25-2004	
A26						
A27						
A28						
A29						
A30						
A31						
A32						
A33						
A34						
A35						
A36						
A37						
A38						
A39						
A40						

FOREIGN PATENT DOCUMENTS								
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
B11								
B12								
B13								
B14								
B15								
B16								
B17								
B18								
B19								
B20								

Examiner Signature	Date Considered
--------------------	-----------------

¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

² Unique citation designation number. ³ See attached Kinds of U.S. Patent Documents. ⁴ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U. S. Patent and Trademark Office: U. S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
Sheet	3	of	4	Application Number	10/645,201
				Filing Date	21 August 2003
				First Named Inventor	Jade M. Kizer
				Group Art Unit	2816
				Examiner Name	Unassigned
				Attorney Docket Number	RBUS 1305-1

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C1	ZERBE, JARED ET AL., U.S. Patent Application No. 09/776,550 filed 2 February 2001, entitled "Method and Apparatus for Evaluating and Calibrating a Signaling System."	
	C2	ZERBE, JARED ET AL, U.S. Patent Application No. 09/976,170 filed 21 October 2001, entitled "Method and Apparatus for Evaluating and Optimizing a Signaling System."	
	C3	U.S. Patent Application No. 10/278,708 filed 22 October 2002, entitled "Phase Adjustment Apparatus and Method for a Memory Device Signaling System."	
	C4	DANIELE, N. et al., "Principle and Motivations of UWB Technology for High Data Rate WPAN Applications," SOC 2003, 4 pages.	
	C5	WIN, MOE Z., et al., "Impulse Radio: How it Works," IEEE Communications Letters 2(2), Feb. 1998, 36-38.	
	C6	DANIELE, NORBERT, "Ultra Wide Band Principles and Applications for Wireless Communications," CEA-LETI Annual Review, 25 and 26 June 2002, 24 pages.	
	C7	U.S. Patent Application No. 09/941,079 filed 28 August 2001 entitled "Clock Data Recovery with Selectable Phase Control Input."	
	C8	Yang, Chih-Kong Ken "Design of High-Speed Serial Links in CMOS" Technical Report No. CSL-TR-98-775, Sponsored By Center for Integrated Systems, Sun Microsystems and LSI Logic Inc. December 1998, pp. 1-182.	
	C9	NAKASE, YASUNOBU ET AL, "Source-Synchronization and Timing Vernier Techniques for 1.2-GB/s SDRAM Interface," IEEE Journal of Solid-State Circuits, Vol. 34, No. 4 (Apr. 1999), 494-501.	
	C10	GILLINGHAM, PETER, "SDRAM Architectural and Functional Overview," SDRAM Consortium (29 Aug 1997), 1-14.	
	C11	"Draft Standard for a High-Speed Memory Interface (SyncLink)", Draft 0.99 IEEE P1596.7-199X (1996), 56 pages	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U. S. Patent and Trademark Office: U. S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<p>Substitute for form 1449B/PTO</p> <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p>(use as many sheets as necessary)</p>				<p>Complete if Known</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td>10/645,201</td> </tr> <tr> <td>Filing Date</td> <td>21 August 2003</td> </tr> <tr> <td>First Named Inventor</td> <td>Jade M. Kizer</td> </tr> <tr> <td>Group Art Unit</td> <td>2816</td> </tr> <tr> <td>Examiner Name</td> <td>Unassigned</td> </tr> <tr> <td>Attorney Docket Number</td> <td>RBUS 1305-1</td> </tr> </table>		Application Number	10/645,201	Filing Date	21 August 2003	First Named Inventor	Jade M. Kizer	Group Art Unit	2816	Examiner Name	Unassigned	Attorney Docket Number	RBUS 1305-1
Application Number	10/645,201																
Filing Date	21 August 2003																
First Named Inventor	Jade M. Kizer																
Group Art Unit	2816																
Examiner Name	Unassigned																
Attorney Docket Number	RBUS 1305-1																
Sheet	4	of	4														

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	C12	GILLINGHAM, PETER, "SLDRAM: High-Performance, Open-Standard Memory," IEEE (1997), 29-39
	C13	SLDRAM Inc., "400 Mb/s/pin SDRAM," Draft Advance (9 Jul 1998), 1-69.
	C14	RAMBUS "Direct Rambus Short Channel Layout Guide, Version 0.95" (August 2001), 40 pages
	C15	RAMBUS "Direct Rambus Long Channel Design Guide" (2000), 45 pages
	C16	INTEL "How to Measure RDRAM* System Clock Jitter" Application Note AP-667 (June 1999), pp. 1-15
	C17	CHANG, KUN YUNG "Design of a CMOS Asymmetric Serial Link" A Dissertation Submitted to the Department of Electrical Engineering and the Committee on Graduate Studies of Stanford University August 1999, 119 pages
	C18	RAMBUS, INC. "RDRAM Direct Rambus Clock Generator" (April 2002), 22 pages
	C19	
	C20	
	C21	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.